



# ecology and environment, inc.

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International Specialists in the Environment

## PRELIMINARY ASSESSMENT

### EXECUTIVE SUMMARY

TO: Alan Altur, U.S. EPA  
FROM: Alice Hadac, FIT  
DATE: October 1, 1991  
SUBJECT: Interlake Property Site, Chicago, Illinois  
ILD000810432/F05-9104-133/FIL0026PA

EPA Region 5 Records Ctr.



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The Interlake Property site is an inactive landfill and lagoon encompassing 289 acres in a heavily industrialized area of southeastern Chicago, Cook County, Illinois. Approximately one-third, or 96 acres, of the site had been used for landfilling and as lagoons. Eighty-seven acres on-site have been designated as wetlands by the United States Army Corps of Engineers.

The site is located west of Acme Steel, formerly Interlake Steel. The site was purchased by Waste Management, Inc., from Interlake, Inc., in June 1981.

Filling operations began in 1968 and ended in 1981. Much of the wastes disposed of at the site were generated from coking operations and steel manufacturing processes. Wastes disposed of at the site include K063 (wean plant sludge), basic oxygen furnace dust, and basic oxygen furnace slag. Pickle liquor also may have been disposed of at the site. Interlake Steel used old sand-mining areas for lagoons on the northeast side of the site. Landfilling of slag and rubble on the southern third of the site has raised the surface elevation approximately five feet above its former level.

United States Environmental Protection Agency (U.S. EPA) inspected the Interlake Property site on June 26 and 27, 1980, and collected samples on October 7, 1980. These inspections focused on the three man-made lagoons. It was observed that one lagoon had been drained by pumps

on-site through a culvert into open water in the wetlands, which flow into Lake Calumet. Black tarry material was also observed covering the banks and surface water of one lagoon. Substances detected in samples collected from the lagoon sludge and surface water included barium (2 µg/g) and chromium (300 µg/g). Copper was also detected in the surface water.

Groundwater samples were also collected for a hydrogeologic study contracted by Waste Management, Inc., in June 1981. The results from six of the shallow bedrock wells indicated concentrations of cyanide (0.10 to 2.96 mg/L) and benzene (0.01 to 0.90 mg/L). U.S. EPA conducted a wetlands study of the southeast side of Chicago in June 1983 and collected five sediment samples from unspecified areas of the Interlake Property site. The results showed cadmium (20 µg/g), lead (4.4 mg/g), zinc (12 mg/g), silver (6.6 µg/g), and PCBs (11 mg/g). Polynuclear aromatic compounds were detected in four of the five samples.

On July 18, 19, and 20, 1989, Illinois Environmental Protection Agency (IEPA) collected groundwater and soil samples for a screening site inspection (SSI) of the Interlake Property site. Groundwater samples were collected from six on-site monitoring wells, which are believed to have been installed during the Waste Management, Inc., hydrogeologic study in 1981. Analysis of groundwater and soil samples revealed concentrations of semivolatile and volatile organics, heavy metals, and pesticides.

Samples collected during the IEPA inspection in 1989 indicate a potential for the migration of contaminants from the site to groundwater in the Niagaran dolomite aquifer. No residents within a 4-mile radius of the site use groundwater for drinking water purposes, with the exception of approximately 20 residences in Dolton. The exact location of these residences is not known, but it is not believed that groundwater contamination from the Interlake Property site would affect the Dolton residences because of their distance (approximately 3 1/2 miles) from the site and because of the presence of the Little Calumet River between the site and Dolton.

Sediment samples collected from the site during the SSI indicate an observed release of contaminants to wetlands on-site. These wetlands flow through surface sands and ditches to Lake Calumet, which borders

the west side of the site. Habitat in and around the on-site wetlands could support the federally endangered Piping Plover, which has been documented as nesting at Lake Calumet. A lake that qualifies as a fishery also exists on-site.

Lake Calumet empties into the Calumet River, which flows into Lake Michigan, depending on lake levels and the lock and dam operation. Two water intakes, serving approximately 4 million people, are located within 15 miles downstream of the site.

Soil contamination is less than two feet deep at the site, according to the SSI, although contamination in the lagoons may be deeper. Persons were observed fishing from the on-site lake, and empty shotgun shells and old duck blinds, indicating hunting on-site, were also observed during the SSI. A group of dilapidated buildings in the southeast corner of the site was being used as a residence. Evidence of occupancy was observed during the SSI.

A release to air was not suspected, although a potential exists for the migration of soil contaminants via windblown particulates.

An off-site reconnaissance inspection was conducted on August 8, 1991, by Ecology and Environment, Inc., Field Investigation Team. Site features were difficult to observe because of the thick foliage on-site. It did not appear that any persons were living in the buildings on the southeast corner of the site.

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POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
IL D000 810432

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) Interlake Landfill and Coke Plant		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER 11236 Torrence Avenue			
03 CITY Chicago	04 STATE IL	05 ZIP CODE 60617	06 COUNTY Cook		07 COUNTY CODE 031
08 COORDINATES - LATITUDE 41° 41' 25.2"		LONGITUDE 087° 33' 37.8"		Lake Calumet Quadrangle	
10 DIRECTIONS TO SITE (Starting from nearest public road) From 94 South exit 95th Street East. Take 95th to Torrence Avenue (about 1 mile) Take Torrence to 110th. Site is located between 110th and 116th Street west of Torrence.					

III. RESPONSIBLE PARTIES

01 OWNER (If known) Interlake, Inc		02 STREET (Business, mailing, residence) 2015 Spring Road			
03 CITY Oak Brook	04 STATE IL	05 ZIP CODE 60521	06 TELEPHONE NUMBER ( )		
07 OPERATOR (If known and different from owner) same as above		08 STREET (Business, mailing, residence)			
09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER ( )		

13 TYPE OF OWNERSHIP (Check one)

☒ A. PRIVATE ☐ B. FEDERAL: \_\_\_\_\_ (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL  
☐ F. OTHER: \_\_\_\_\_ (Specify) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply) *submission date*

☒ A. RCRA 3001 DATE RECEIVED: 11.18.80 *MONTH DAY YEAR* ☐ B. UNCONTROLLED WASTE SITE (RCRA 103) DATE RECEIVED: \_\_\_\_\_ *MONTH DAY YEAR* ☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION <input checked="" type="checkbox"/> YES DATE <u>10.07.80</u> <i>MONTH DAY YEAR</i> <input type="checkbox"/> NO		BY (Check all that apply) <input checked="" type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA CONTRACTOR <input type="checkbox"/> C. STATE <input type="checkbox"/> D. OTHER CONTRACTOR <input type="checkbox"/> E. LOCAL HEALTH OFFICIAL <input type="checkbox"/> F. OTHER: _____ (Specify) CONTRACTOR NAME(S): _____			
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02 SITE STATUS (Check one) <input type="checkbox"/> A. ACTIVE <input type="checkbox"/> B. INACTIVE <input checked="" type="checkbox"/> C. UNKNOWN	03 YEARS OF OPERATION BEGINNING YEAR _____ ENDING YEAR _____ <input checked="" type="checkbox"/> UNKNOWN
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04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN OR ALLEGED  
heavy metals (toxic, persistent)  
oily waste (ignitable, soluble)

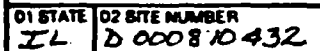
05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION  
groundwater (environment)  
surface water (population/environment)

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)  
☐ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required) ☐ C. LOW (Inspect on time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT Cliff Gould		02 OF (Agency/Organization) IEPA-DLPC Maywood		03 TELEPHONE NUMBER 1321345-9780	
04 PERSON RESPONSIBLE FOR ASSESSMENT Suzanne Kozlowski		05 AGENCY USEPA	06 ORGANIZATION E+E (FIT)	07 TELEPHONE NUMBER 1321663-2415	08 DATE <u>1.8.86</u> <i>MONTH DAY YEAR</i>



☐ I. HIGHLY VOLATILE  
☐ J. EXPLOSIVE  
☐ K. REACTIVE  
☐ L. INCOMPATIBLE  
☐ M. NOT APPLICABLE

## ecology and environment



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE IL 02 SITE NUMBER D 000810432

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: 0

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

Because wastes were disposed of in a wetland, the potential for groundwater contamination of the shallow aquifer exists. A clay layer separates the shallow aquifer from the deeper aquifers, however, the clay may not prevent downward migration of contaminants. Ground water is not used for drinking water.

01 ☒ B. SURFACE WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: 0

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

Surface water contamination is likely because site is in a marshy area adjacent to Lake Calumet. The Little Calumet River is 1/2 mile east of the site.

01 ☐ C. CONTAMINATION OF AIR

03 POPULATION POTENTIALLY AFFECTED: 1

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

None documented or reported

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

None documented or reported

01 ☐ E. DIRECT CONTACT

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

None documented or likely. It is unknown what the site access is.

01 ☒ F. CONTAMINATION OF SOIL

03 AREA POTENTIALLY AFFECTED: 240  
(Acres)

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

Potential for soil contamination exists because site is in a wetlands area.

01 ☐ G. DRINKING WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: 0

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

Drinking water for the area is Lake Michigan surface water. The intakes are >3 miles from the site.

01 ☐ H. WORKER EXPOSURE/INJURY

03 WORKERS POTENTIALLY AFFECTED: unknown

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

None documented  
It is unknown if there is an activity on site

01 ☐ I. POPULATION EXPOSURE/INJURY

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

None documented. It is unknown what the site access is.



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I IDENTIFICATION

01 STATE 02 SITE NUMBER  
IL D000810432

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

None documented or reported

01 ☐ K. DAMAGE TO FAUNA  
04 NARRATIVE DESCRIPTION (include name(s) of species)

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

Heavy metal contamination was found in the sludge. If the contamination migrates into the Little Calumet River, fish could become contaminated.

01 ☐ L. CONTAMINATION OF FOOD CHAIN  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

See above K. The Little Calumet River is used for recreational fishing. Heavy metals bioaccumulate.

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES  
(Spills/leak/standing liquids/leaking drums)

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 0

04 NARRATIVE DESCRIPTION

Site is in a wetlands area and has no liner to prevent migration of contaminants.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

None documented

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

Contamination appears doubtful. Site is in wetlands area. It is unlikely that sewers have been placed in the wetlands area.

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

The site was permitted for waste piles and containers as storage methods. USEPA site inspections confirmed that lagoons were used for sludge and oily black liquid disposal. They were permitted to dispose of tank tar sludges from coking operations.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

None

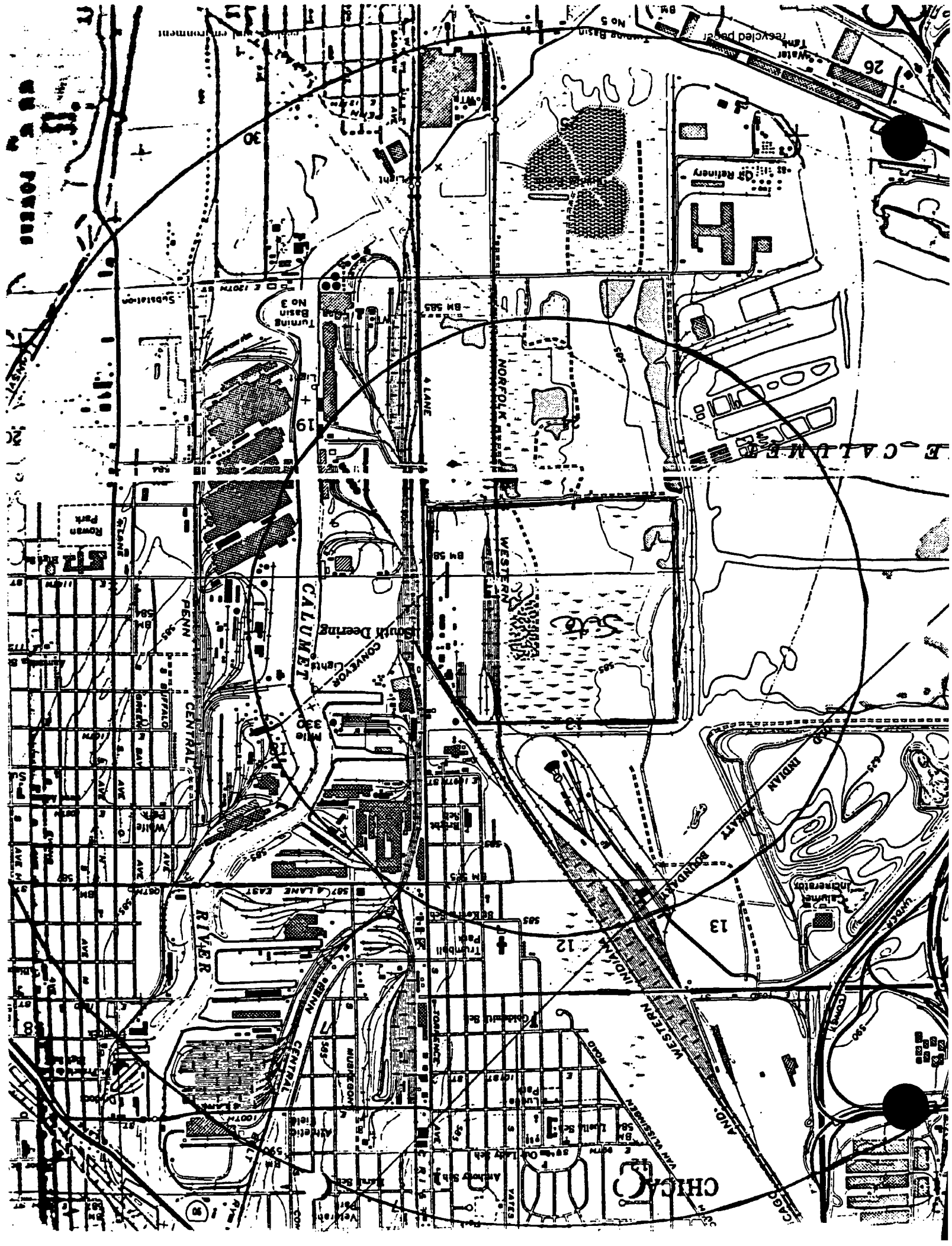
III TOTAL POPULATION POTENTIALLY AFFECTED: 136,000

IV. COMMENTS

None

V. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analysis, reports)

see documentation sheet





## DOCUMENTATION SHEET

 SITE Interlake Landfill and Coke Plant  
 IDENTIFICATION NUMBER ILD 002810432

SOURCE NUMBER	DESCRIPTION OF SOURCE
1A, 1B, 1C, 1D	1A) QUAD NAME <u>Lake Calumet</u> SIZE: <u>7.5</u> or 15 YEAR <u>1977</u> revised  1B) QUAD NAME <u>Blue Island</u> SIZE: <u>7.5</u> or 15 YEAR _____  1C) QUAD NAME _____ SIZE: 7.5 or 15 YEAR _____  1D) QUAD NAME _____ SIZE: 7.5 or 15 YEAR _____
2	Environmental Assessment SCA Chemical Services Company Hazardous Waste Management Facility Chicago/Lake Calumet 1980
3	Phone log to Jerry Larsen of Chicago Water Department by R.A. Jacquette on 12-23-85
4	Endangered Species List, U.S. Dept Interior, U.S. Fish & Wildlife Service
5	Illinois Travel and Leisure Guide
6	Application for RCRA Part A Permit
7	USEPA site inspection memos and sampling results
8	1980 Number of Inhabitants Illinois U.S. Dept. of Commerce, Bureau of The Census
9	Phone log to Mr Adduci of City of Chicago Water Dept by Sue Ryan on 11-27-85

END